137 On such soil and in such a climate, vegetation is reduced to some sparse, stunted trees, some angular bushes where thorny plants predominate. Upon the arrival of the rains, the land becomes covered in an incredibly short time with flowers and tall grasses. But during the other seven months, these plants wither and dry up (when the brush fires of the Indians do not do away with them completely) and the sand, white, red or ocher according to the region, appears in large
136 tracts under the charred branches. This is the time when the rare
137 small game which wanders across the plateau concentrates in the impenetrable groves (capões) whose rounded dome marks the presence of springs. There the animals find small pastures still green, usually bordering the narrow ribbon of forest which borders the rivers.

133 The courses of water are numerous and important, the two principal groups forming respectively the basins of the Juruena and of the Roosevelt. All the valleys are approximately parallel, and their waters flow toward the north. They cut the plateau by as many longitudinal ditches, and their course is cut up by cascades of rapids, sometimes also by waterfalls--for example, the falls of the Papagaio River at Utiarity, the falls of the Sacre River, and the rapids of the Juruena. These accidents correspond to the passage from sedimentary soil to crystalline rocks which reappear in the middle part of the Amazon basin. In their upper courses, owing to the nature of the terrain, the rivers have deep beds sometimes reaching a depth of some thirty meters. The water remains so transparent, however, that one can easily see the bottom and the fish which swim around. These conditions aggravate the food problem even more. The fish sees the fisherman through the crystal green and escapes him without fail. This is true especially concerning the branches of the Tapajoz. When one reaches the lowlands of the valley of the Madeira, one does not only go from prairie to humid forest, the water courses [6] are also transformed, with the beds flat and muddy, and the waters a reddish color.

101 One can see that the frontiers of the territory occupied by the
131 Nambikwara correspond--roughly in the south and north, and almost exactly in the northwest--to the limits of the plateau. Toward the east, where the border follows closely the course of the Juruena, the Nambikwara border the Paresi and the Iranpe Indians who occupy the southern and eastern parts of the plateau.

161 It is impossible to estimate even approximately, the number of Nambikwara population since their territory remains to a large extent unknown. But it seems reasonable to assume that at the end of the construction of the telegraph line (around 1915-1920) this number must have been about five times more than at present. In postulating

593 of the couple among the Nambikwara. It is the economic and psycho-
593 logical unit par excellence. Not only among errant bands which are
182 made and unmade unceasingly does the couple appear as the only
462 stable reality (at least theoretically), but it is the couple alone which assures the subsistence of the members of the group. The Nambikwara live under a double economy: the economy of hunters and gardeners on one hand, the economy of collectors and gatherers on the other. The first is assured by the man, the second by the woman. While the masculine group departs for a whole day to hunt, armed with bows and arrows, or works in the gardens during the rainy season, the women, armed with digging implements, wander with their children across the plain, and gather, pull out, pick, capture, seize [55] everything on their route that is worthy of serving as food: grain, fruits, berries, roots, tubers, eggs, small animals of all sorts. At the end of the day, the couple meets around the fire. When the manioc [252] is ripe, and as long as it remains so, the man brings a bundle of roots which the women pound and press to make a kind of pancake (uidnoou, al), and when the hunt has been fruitful, they rapidly cook pieces of small animals by burying them under the burning cinders of the family fire. But for seven months of the year, manioc is rare. As for the hunt, it is most often a matter of chance in these sterile sands ●[137] where a skinny small animal hardly ever leaves the shade, and the pasture lands at the heads of rivers are separated from one another by considerable stretches of semi-desert brush. Thus, the family [24] must most often subsist on the collection of the women. Very often we have attended (and sometimes shared) these diabolical doll-size snacks which, for the Nambikwara, for half the year, are the only hope of not dying of hunger. When the man, silent and fatigued, re- [262] turns to camp and throws his bow and arrows which he could not use to one side, from the basket of the woman is extracted an extraordinary and moving collection: some orange fruit from the buriti palm (e2eru, al, e[illegible]nde, bl, 2ola, c), two fat poisonous spiders (korairu, al, kuinde, bl), some tiny lizards' eggs and some of these animals (kataherisu, al, nagide, bl, talime, c), a bat, some small nuts from the bacaiuva palm (arookesu, al, kokoninde, bl), or naguassu (aradikisu, al), a handful of grasshoppers (takedasu, al, tagem, [252] bl, tanki, c). The pulpy fruits are crushed with the hands in a calabash filled with water, the nuts cracked with the blows of a stone, the animals and larvae buried pell-mell in the coals; and this repast is gaily devoured, a meal which would not be sufficient to satisfy the hunger of a white person, but which feeds a family here.

1: Lévi-Strauss E-5 (1938-1939) 1948 SP17 Nambicuara SP17

[End Plate I]

137
133

24
142
482
415

484
482
415

1. Characteristic aspect of the savannah during the dry season. 2. A native garden in the middle of the gallery forest. 3. Travelling.

2: Lévi-Strauss E-5 (1938-1939)1948
SP17 Nambicuara SP17

Nambicuara (Roquette-Pinto's *Uaintaçu*, which includes his *Kabishi*, *Taçuzni*, *Tauité*, *Tarusté*, and *Tashuité*) between the Guaporé River Basin in the south and the Tenente Marquês, Iké and Roosevelt Rivers in the north and northwest; *Western Nambicuara* (new), closely related to the central and southern groups and living on the headwaters and in the upper basin of the Roosevelt River; and *Northern Nambicuara* (new), speaking its own language and living north of the central group.

The Indians mention other tribes north of the *Nambicuara;* one called *Salumã*, *Sarumã*, or *Solondé* is almost certainly the *Mundurucú;* another may be the *Tapanyuna*.

In 1907, Rondón estimated the total *Nambicuara* population to be 20,000. In 1912 Roquette-Pinto met 1,000 to 1,500. It is doubtful whether the total population, which has been decimated by several recent epidemics, now greatly exceeds 1,500.

The *Nambicuara* language was previously thought to be isolated, but its distinctive trait—the use of classificatory suffixes dividing the universe into about ten categories—is strongly reminiscent of *Chibcha*.

Nambicuara culture, although less primitive than that of the *Sirionó* to the southwest, is strikingly simple in comparison with that of the neighboring *Paressí* to the southeast and of the *Tupí-Cawahíb* to the northwest. Their lack of the hammock, their custom of sleeping on the ground, their crude ceramics (the *Eastern Nambicuara* entirely lack pottery), the nakedness of both sexes, their nomadism, their use of temporary shelters during most of the year, the general poverty of their material culture, and the simplicity of their social organization distinguish them from the higher cultures of the Guaporé River area, to which they nevertheless probably belong.

CULTURE

SUBSISTENCE

The *Nambicuara* habitat is a savannalike plateau about 500 to 1,500 feet (150 to 500 m.) above sea level with an arenaceous soil which comes from disintegrated sandstone bedrock. Except for narrow gallery forests along river banks, the region is infertile, having only shrubs and small trees with thorns or thick bark.

In this unproductive environment the *Nambicuara* have a dual subsistence pattern. They are both seminomadic bush dwellers and incipient farmers. During the dry season, women, accompanied by their children, forage with digging sticks for wild fruits, seeds, and roots, and catch grubs, rats, bats, spiders, snakes, lizards, and other small creatures, while men hunt what large game they can find with bows and arrows and collect wild honey.

4: Oberg E-5 (1949)1953
SP17 Nambicuara SP17

THE PEOPLE AND THEIR HABITAT

The telegraph line which runs from Cuiabá, the capital of Mato Grosso, to Porto Velho on the Madeira River has created a narrow corridor of the known through the vast unknown stretches of northwestern Mato Grosso. Along this line the Government has established telegraph stations manned by telegraph operators, many of whom are Paresí Indians. A makeshift road, over which trucks can travel, follows the line a few miles past Utiarity to Burity; beyond this the road is no more than a trail along which men ride on horseback and goods are transported by pack oxen. At Vilhena there is an army airfield.

Since 1912, when the line was completed, this corridor has been the highway of men who have sought rubber, diamonds, gold, and Indian souls. [137 317] No permanent settlements of farmers or stockmen, as yet, occupy this vast hinterland. The rubber concessioner, usually a man from Rio de Janeiro, São Paulo, or Cuiabá with sufficient funds to buy a truck or two, lays claim to a stretch of "galeria" forest, builds a camp along the road, hires a number of tappers, and goes into business. Each underpaid tapper works an area of trees, bringing his rubber to camp on his back or more rarely on ozback. Food must be brought in from Cuiabá, and as supplies, at best, are precarious, any delay in truck transportation brings scurvy and starvation. Eventually the workers drift away, some it is said dying on the way, and the operation ceases. During the last war the United States Government, through the Rubber Reserve, enabled rubber operations to expand. Good camps were established and the road improved. Today, however, the camps and the road are deteriorating, leaving the field to the shoe-string operator with his second-hand truck. The operations of the gold and diamond miners are still more uncertain. In small groups they enter the area, their scanty supplies carried on oxen and mules. Men unfamiliar with the semiarid wastes easily miss the [133] areas where fodder and water can be obtained, the pack animals die and the stranded men are left to find their way out the best they can. At Utiarity I met a miner who was waiting for food supplies from Cuiabá. He had four oxen and two

[p. 82(B)]

132
134 The soil here is sandy and the rainfall insufficient
to support a forest. The vegetation consisted of
136 stunted piqui, mangabeira, fruta de lobo, lixeiro,
137 and other gnarled cerrado trees with the surface
sparcely covered with bunches of wiry grass and
other drought-resistant plants. During the whole
day we saw only four deer and two rheas, which
gives some idea of the poverty of the area. This
000 is public domain and apparently unwanted by
stockmen owing to its poor soil and lack of water.
By now we had left the telegraph line, which
crosses unbridged rivers, and were winding around
the headwaters of the streams. That night we
camped at Sucuruina where two palm-leaf-cov-
ered sheds, left by "tropeiros," provided some
shelter from the drizzling rain.

133 The following day the skies cleared and from the
137 tops of the folds in the plateau we obtained
magnificient views of the great plain. What few
312 trees could be seen were no more than 5 or 6 feet
high. A curious phenomena seen along the plateau
are the patches of forest of 5 to 10 acres in extent
which appear to grow straight out of the semi-
desert. Evidently ground water comes near the
surface in these spots, permitting the growth of a
genuine forest. Another interesting sight was the
birth of rivers. In the shallow valleys formed by
the folds, one could first see swampy ground, then
tall grass, then bushes, then short trees, and
finally the tall trees forming a "galeria" forest
which bordered a river winding its way northward
to form one of the headwaters of the Amazon
system.

At 4 o'clock we arrived at the Sacre River where
the trucks had to be ferried across on a raft.
As this operation took until dark we camped for
the night in some vacant buildings left by rubber
workers. Before leaving next morning we visited
the waterfall (Salto Bello) about 200 yards below
the ferry where the Sacre River tumbles over a
sheer drop of about 180 feet. Early in the after-
noon we reached the Papagaio River and after
ferrying the trucks across we were in Utiarity.
Both the Sacre and the Papagaio are deep clear
streams about 100 yards in width at the ferry
crossings. These headwater streams are evidently
fed by underground water, for their level does not
vary appreciably during the year.

000 Utiarity, which was to be our base camp for the
remainder of June and for July, is built on an

1 [on the Serra dos Parecis.] [p. 83(6)]
- Analyst

4: Oberg E-5 (1949) 1953 SP17 Nambicuara SP17

APPENDIX 1

RESOURCES OF THE NAMBICUARA

AGRICULTURAL FOOD PLANTS

241
824

Portuguese name	English name	Scientific name	Nambicuara name
Amendoim	Peanuts	*Arachis hypogaea*	Wäläm.
Aruerão	Arrowroot	*Maranta arundinacea*	Yalam.
Batata doce	Sweetpotatoes	*Ipomoea batatas*	Wha.
Cará		*Dioscorea* sp.	Ka'lim.
Fava	Beans	*Phaseolus lunatus*	Kwê'm.
Mandioca brava	Manioc	*Manihot esculenta*	Wallam.
Milho	Maize	*Zea mays*	Kayãm.

AGRICULTURAL DOMFOOD PLANTS

Algodão	Cotton	*Gossypium* sp.	Kõam.
Fumo	Tobacco	*Nicotiana tabacum*	Ê'ne.
Quiabo	Gumbo	*Lagenaria vulgaris*	Kaê'lêmem.
Urucú		*Bixa orellana*	D'uallam.

WILD FOOD PLANTS (FRUITS)

137
824

Ananás	Pineapple	*Ananas sativus*	Kallãn.
Babaçú		*Orbignya martiniana*	Walaallãm.
Bacaba		*Oenocarpus bacaba, distichus*	Wãlam.
Bacabeira		*Attalea oleifera*	Kallallãm.
Bacuí (açaí)		*Maurtia flexuosa; M. aculeata*	Kãrn.
Cajá-de-campo	Savanna cashew	*Anacardium nanum*	Ê'lan.
Cajú-do-mato	Forest cashew	*Anacardium giganteum*	Dawallãm.
Cambará		*Dipteryx odorata*	Nagãm.
Fruta-de-lobo		*Solanum lycocarpum*	Kãmallãm.
Jabuticabeira	Jabuticaba tree	*Eugenia cauliflora*	Allallam.
Mangabeira	Mangaba tree	*Hancornia speciosa*	Kalãllãgam.
Marmeleiro-de-campo	Quince tree	*Magonia pubescens*	Tãnãm.
Marmeleiro-de-capãozinho	do.	do.	Kaê'l'lãm.
Marmeleiro	do.	do.	Wallãm.
Marmeleiro	do.	do.	Kalã'lãmi.
Pitajaieira	Pitaji tree	*Caryocar brasiliensis*	A'lan.
Pitaiba bravinha de sabonete			Allãnyalam.

WILD PLANTS USED IN MANUFACTURE

Bacuí		*Maurtia flexuosa; M. aculeata*	Yãam.
Carandova		*Guadua* sp.	Kallãnam.
Cipó		*Philodendron fodo*	Kaalam.
Pirra-de-anta (Tariqueí)		*Jacaranda copaia*	Kalã'lm.
Sapé		*Imperata brasiliensis, contracta*	Kalãllãnam.
Seringueira	Rubber tree	*Hevea brasiliensis*	Wallãllãm.

[p. 124]

4: Oberg E-5 (1949) 1953 SP17 Nambicuara SP17

INDIAN TRIBES OF NORTHERN MATO GROSSO, BRAZIL—OBERG

WILD PLANTS USED IN MANUFACTURES—Continued

Portuguese name	English name	Scientific name	Nambicuara name
Bobra		*Spigrus cyperus*	Dugedágatan.
Taquara para ponta de flecha	Bamboo for arrowheads		Kayéam.
Taquara para flauta nasais	Bamboo for nasal flute		Ka'd'inam.
Taquara para pamplpa	Bamboo for pamplpa		Wadugatan.
Tucum		*Astrocaryum tucuma*	Kalé'un.

PLANTS USED FOR DRUGS AND POISON

Timbó		*Paullinia pinnata*	Kéuain.

PLANTS USED IN VARIOUS ECONOMIC WAYS

Limão			Kalitsun.
Rubim			Sa'lún.

MAGICAL PLANTS

Pemtudo			Inkdnkdlitsun.

ANIMALS HUNTED FOR FOOD[1]

Anta	Tapir	*Tapirus terrestris*	Aitsun.
Arirambóia	Otter	*Pteronura brasiliensis*	Dirún.
Bagre		*Ageneiosus ucayalensis*	Ilru.
Cutiará	Paraury	*Tayassu pecari*	T'ilún.
Queixada	Moun	*Mus musculus*	Sdulún.
Capivara	Capybara	*Hydrochoerus hydrochaeris*	O'run.
Caxiri	Cavia	*Kerodon rupestris*	Kalun.
Cotia	Rodent	*Dasyprocta agouti*	Dilún.
Cunaxi		*Atelus niger*	Hdaulun.
Cutia		*Atelus paniscus*	Kalitun.
Jaguatirica		*Felis pardalis tigrinoides*	Inandrúlun.
Lontra	Otter	*Lutra paranensis*	Kwandúlun.
Macaco-prego	Monkey	*Cebus apella*	Hún.
Onça parda	Brown panther	*Felis concolor*	Inandrúnamun.
Onça pintada	Jaguar	*Felis onca*	Inandrúnun.
Ouriço		*Coendou prehensilis*	Kotsúnun.
Paca		*Cuniculus paca*	Otsún.
Porco do matto			Y'dnúnun.
Preguiça		*Bradypus tridactylus*	Alún.
Rato de chaqueira		*Sooptocongo guembiquarus*	Nónun.
Rapoi-pinenga		*Mides rosalia*	Tsúlún.
Tamanduá-bandeira		*Myrmecophaga jubata*	Dúlún.
Tamanduá-colete		*Cyclopes didactylus*	Wúlun.
Tatú-bola	Armadillo	*Tolypeutes tricinctus*	Núnun.
Tatú-canastra		*Priodontes giganteus*	Wakrún.
Tatú-mansilo			Sunúlun.
Tatú-fita			A'lrú.
Tatú-15-quilos			A'lúnun.
Veado campeiro (a)	Deer		Yoalún.
Veado campeiro (b)	do		Wúlún.
Veado mateiro		*Mazama rufa*	Kuúlún.

[1] Other can be substituted on the menu.

[p.125]

361 The circular spot formed by the village grounds in the middle of the bush gradually acquires the appearance of a star, owing to the paths that lead out from its circumference.

[312 413] Access to the village grounds is free. There is no fence or hedge to prevent admittance to the plaza; no fortifications or other defensive features are to be found in the vicinity. (1)

> 1. The Tupian Indians of the Gi-Paraná, on the other hand (like the Tupinambá of old and other [tribes]), obstructed the paths leading to their villages with spikes [estrepes] which had to be removed when they established relations with the Rondon Mission. (See Col. M. Rondon, Conferencias [Lectures], pp. 161-162.)

Nambicuara villages always consist of two houses, which are set face to face at opposite ends of the plaza.

● [37] [220] The region consists of extensive forests, stretches of scrubland [cerrado], areas of nearly impenetrable bush [charravascal], and a few stretches of open prairie. The Indians prefer the scrubland as the site of their villages.

The forest is dangerous on account of snakes, wild beasts, and even timber which often crashes down on the hunters; the prairie is dangerous because it exposes the village to enemy attack and does not afford any protection against invaders. But the scrubland serves the purpose very well; it has few disadvantages and many advantages.

362 This the Nambicuara know well: their hut blends into the greyish hues of the surrounding vegetation; it is like a shrub among other shrubs; from a distance it can hardly be distinguished. Its shape, though well defined, merges into the vague forms of the bush.

Naturally, those whose eyes are accustomed to the dust-veiled mass of xerophytic upland vegetation can quickly spot the huts; the illusion cannot deceive an experienced eye. But the mimicry is nevertheless real.

7:Roquette-Pinto--33A E-4, 5 (no date) 1938 SP17 Nambicuara SP17
(ca. 1912)

137

Fig. 31. Solanum fruit used by the Serra do Norte Indians.

105 Kiriri is another language which bears some similarity to the dialects of the Serra do Norte.

8. In addition to linguistic affinities, the Serra do Norte Indians present certain ethnographic traits peculiar to the Ge-Botocudo tribes and rarely found among Indians of other groups: unfamiliarity with navigation and the hammock, absence of pottery, screens of leaves and branches, etc.

This being the case, the Serra do Norte Indians (Nambicuara) add a western link to the chain [314] of Ge peoples whose westernmost representatives had been until now the Suya.

9. The Nambicuara have been neighbors of the Paresi for centuries but have been influenced only slightly by that tribe. The two cultures kept evolving side by side, at different stages of development and with little interaction.

10. Agriculture arose early among the Serra do Norte Indians; this seems to have resulted from the demands of the geographical environment. It is almost certain, however, that the rise of this activity was conditioned by alien influences, not yet known, which provided the opportunity to acquire the necessary materials; for the species encountered among the Nambicuara are the same as those cultivated by other inhabitants of the region.

11. From the standpoint of physical anthropology, the Serra do Norte Indians are completely distinct from their neighbors. Those American Indians who come closest to them in terms of anatomical characteristics are the Nu-Arawakan.

12. The Serra do Norte Indians are affected by a special skin disease . . . which is unknown to their neighbors . . . [and] probably a variety of tinea imbricata.

13. Their main parasites are Siphonaptera (chigoe, (1) believed

1. Tunga penetrans,

to be of African origin but definitely a species of tropical America); and Hemiptera of the Pediculus humanus species, which are found among all the world's peoples. [Plates, p. 284.] [315] Perhaps this particular insect should be considered a variant on account of its size.

7:Roquette-Pinto--64A E-4, 5 (no date)1938 SP17 Nambicuara SP17
(ca. 1912)

137

Louse of the Serra do Norte Indians.

(201)

/220 cont./

The Tamandé Ñambikwara, of the upper course of the Roosevelt River, assured me that curare had come to them from other Indians living farther to the north, in the region of the Gy Paraná /Gi-Paraná River/; it was not possible to make them specify what kind of Indians these were.

The Cabixiana /Cabishi?/ of the Rio Mequem, to the northeast of Ñambikwara territory, also use curare. According to a civilized Indian of this group encountered at the post of Baron de Melgaço, their product with a complex vegetable base is prepared secretly and only by a few old men; it is a hard curare in a jar. It is used for hunting, even of tapirs, and for war.

The Pareci, along with the Ñambikwara, represent the extreme southern point of the spread of curare, the use of which as one goes toward the Amazon becomes more and more frequent and its preparation surrounded with more mystery.

All the curares are not as simple as the Ñambikwara curare, but all appear to have as their principal base a species of Strychnos which varies according to the region. Certain Strychnos such as St. toxifera Benth., St. tedualia Barb. Rod., and especially St. crevauxhiana Baill, are particularly toxic; others like St. pseudo-quina are very low in poisonous elements.

Besides the Strychnos, active elements of curare, of numerous other plants generally poisonous but with very diverse properties, and of animal substances such as venoms, often enter into the composition of this poison. Their addition answers different ends.

Sometimes these are resins or gums whose sole utility is to harden the product and to assure its preservation.

Sometimes they are toxic substances destined to reinforce or to complete the action of the Strychnos.

/221/ In other cases other substances without any actual effect but with magical properties are added to curare. Their nature is infinitely variable.